Too Seng Wei(Too)

Malaysia citizen

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PERSONAL STATEMENT

Fresh Undergraduate with deep learning research interest, also find a balance crossing point between research and practicality. I am looking for a more exciting challenge and growing opportunity in the deep learning(Computer Vision, Natural Language Processing) field at the moment.

EDUCATION

Multimedia University (MMU), Malaysia

Bachelor of Computer Science (Hons). Class of 2020. Current CGPA 3.46/4.00

CERTIFICATION

Deep Learning, a 5-course specialization by deeplearning.ai on Coursera. Certified in May 2019
Reinforcement Learning online course by David Silver on UCL. Unofficially Completed in Feb 2019

RESEARCH EXPERIENCES

Research Assistant

AIIU Lab, Academia Sinica, Taipei

April` 2020 - June` 2020

Propose and build novel Conditional Generative Adversarial Network architecture for human face lifespan age progression including but not limited to add constraint to generated head shape, relationship between content space and temporal space.

Research Assistant

ViprLab MMU, Selangor

June' 2019 - Feb' 2020

Study and build Affective Analysis deep learning model to interpret and understand human emotion from various emotional schema in narrative story domain using transfer learning and modern architecture such as Transformer, BERT and LSTM.

EMPLOYMENT EXPERIENCES

Part-time Project Lead Developer

Axvel, Selangor

April' 2019 - Nov' 2019

Led Front-end team and built a Single Page Application for a Courier Delivery Website at Sep` 2018 and joined as Lead Developer in April` 2019. Leading development team and in charge of rebranding and expansion of core products. Daily work also included doing code & design review and involved in both Frontend and Backend Development as well as bringing modern software development techniques such as continuous integration and continuous development. Tech Stack: ExpressJS, VueJs, ReactJS, Parse, MongoDB

Freelance Game Programmer

Feb' 2019 - April' 2019

Successfully develop and launch a marketing campaign game for 22000 players across 3 months. Design and built 5 Hyper Casual Games for Marketing Campaign.

Tech Stack: Unity2D(C#), PHP, MySQL, PhaserJS

Part-time Full Stack Developer

BotAhead, Selangor

Jun' 2018 - Dec' 2018

Doing front-end development for the company in-house product, ChatBot. Also, involved in Full-stack development for multiple Single Page Applications, including Currency Exchange System and Skill Sharing Marketplace for company outsource projects.

Tech Stack: VueJS, ReactJS, PHP (Laravel), MySQL

PUBLICATIONS

Story-based Multi Aspect Affective Analysis(To be submitted)

Work is done during Bachelor Degree for FYP under ViprLab MMU. Propose an encoder-decoder framework to perform sentence-level emotion recognition for narrative story and declared as benchmark result. Achieve 0.0846 MAE(dimensional emotion recognition task) and 54% accuracy(category emotion recognition task). This work also is the first use of self-attention attention mechanism in Emotion Representation Mapping task and achieves state-of-the-art at mapping a complex emotion.

HONOUR & AWARDS

Fusionex Data Challenge 2019 - 2nd Runner Up Awards

Analyse the given dataset, followed by the demonstrate how explored data can be used to solve real-life problems. Some proposed suggestions included user profiling, retention analysis and prediction, as well as suggestions on campaigns based on scientific data.

Pos Aviation Hackathon 2019 - 2nd Runner Up Awards

Design and build a real-time AR in-door navigation app with AI ChatBot assistant which aims to provide better and smarter end-to-end user experience for passengers in Airport. Archived and awarded 2nd Runner Up in the Hackathon main prize track.

Tech Stack: Unity3D(C#), Python

VR Hackathon 2018 - Finalist

Proposed and built a prototype on how Virtual Reality technology can create a convenient and immersive experience to control and oversee the real-world factory machines system in real-time. This project got into finalist and showcased in MMU Faculty of Engineering Digital Home Lab and Malaysia 5G Showcase Exhibition 2019.

Tech Stack: Unity3D(C#), Flask, Arduino (UNO), Socket.IO

Malaysian Computing Challenge (MCC) 2016 - Silver Award(First Runner Up)

Annual online competitive programming competition by Malaysian Informatics And Programming Society.

TALKS AND WORKSHOP

Student Tutor of Github Workshop

Provide tutoring to attendees on git and helps on bash command and git command.

Student Tutor of Woman Who Code KL Beginner Python Workshop

Provide tutoring on basic python and programming knowledge.

ADDITIONAL EXPERIENCES

Open Source Contributor

Open Promises Malaysia

Jan` 2019 - Present

Open Promises is a Civilian-led NGO that is based on recording and tracking promises made by politicians. Enhance existing portal user experience for promise tracker also building deep learning classifiers to boost up the productivity of promise tracker.

Tech Stack: VueJS, Python

President

Hackerspace MMU

August` 2019 - Present

Community-operated, where like-minded people meet and share their interest in tinkering with technology. Generally, all members work on their own side projects while learning from each other, and present project progress and learning outcomes to each other from time to time.

Vice President

IT Society MMU

June' 2017 - June' 2018

The official club for the Faculty of Computing and Informatics in MMU. Strengthen the bonding between committees and oversee all the events organized by IT Society. Led and organized multiple Technical Workshop and Tech Career Days 2018.

Event Director

3 Days of Code 2018

April' 2018

Programming Contest and theme Hackathon for undergraduate students in Malaysia. Attracted a total 102 participants across West Malaysia, and secured RM 11000 sponsorship for events.

LANGUAGES & TECHS

Tech

- Python(Pytorch, Tensorflow)
 - Go
 - Flask
 - AWS
 - Java
 - C++
 - HTML
 - CSS3(SCSS)
 - MongoDB
 - MySQL
 - Javascript(VueJs, ReactJS, NodeJs)

- PHP(Laravel) - Unity3D(C#) - Docker

Human:

- English
- Malay
- Chinese
- Taiwanese

SIDE-PROJECTS

[Computer Vision] Satellite Image Classification

Conduct an ablation study between traditional machine learning and deep learning/transfer learning in satellite image classification. SIFT and SVM represent traditional methods while VGG and Neural Network with Attention mechanism stand for deep learning and transfer learning camp.

[Natural Language Processing] Sentiment Analysis

github.com/weiweitoo/airline-twitter-sentiment

Perform Sentiment Analysis (Positive, Neutral, Negative) on US Airline Twitter Data on Kaggle Challenge using ULMFiT. Well-trained models get 86% accuracy.

[Reinforcement Learning] Poker-21 Game Al Agent

github.com/weiweitoo/easy21-rl

A reinforcement learning agent that learns to play a poker-21 game in a controlled environment using Q-Learning. Well-trained agents are able to get 60% of winning rate versus a ruled-based Bot.

[Web Game] Can You Get 1024?

hitoo.co/CanYouGet1024

Casual HTML5 Game that challenges player response pace with the growing speed of difficulty. Tech Stack: Javascript (PhaserJS)

[Mobile Game] Jump and Shoot

hitoo.co/jump-and-shoot/index.html

An attractive Casual Game with infinite levels that challenge player perseverance, jumping on the moving ground. Tech Stack: Unity2D(C#)

[VR Game] The Busy Shopkeeper

hitoo.co/busy-shopkeeper/index.html

An Action VR game that required the player to complete different tasks at the same time using "mind-control" power. Tech Stack: Unity3D(C#)